

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/051,861	01/15/2002		Wei Luo	CISCP733	1638	
26541 7590 02/20/2008 Cindy S. Kaplan				EXAMINER		
P.O. BOX 244	8	TANG, KAREN C				
SARATOGA, CA 95070				ART UNIT	PAPER NUMBER	
				2151		
				MAIL DATE	DELIVERY MODE	
				02/20/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

$\Lambda I_{\Lambda}$	į
<i>IVX</i>	
W/X	
/ I // \	

i	Application No.	Applicant(s)					
	10/051,861	LUO ET AL.					
Office Action Summary	Examiner	Art Unit					
	Karen C. Tang	2151					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status		•					
1) Responsive to communication(s) filed on 25 Se	eptember 2007.						
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	action is non-final.	,					
3) Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) Claim(s) 1-28 is/are pending in the application.	•						
4a) Of the above claim(s) is/are withdraw	vn from consideration.						
5) Claim(s) is/are allowed.		•					
6)⊠ Claim(s) <u>1-28</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10)☐ The drawing(s) filed on is/are: a)☐ acce	•						
Applicant may not request that any objection to the							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119		·					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date.  Solution 1							
Paper No(s)/Mail Date	6) Other:						

- This action is responsive to the amendment and remarks file on 9/25/07.

- Claims 1-28 are presented for further examination.
- Due to Applicant's argument/remark filed on 9/25/07, the final rejection filed on 8/30/07 is now withdrawn. The new final rejection is presented.

## **DETAILED ACTION**

## Response to Arguments

Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 12-18 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wenzel (US 2002/0034939) in view of Haverinen et al hereinafter Haverinen (US 7,107,620).

1. Referring to Claims 1, 3, 14, 18, and 25, Wenzel teaches a method for providing authentication in a network having a first AAA server (122, Fig 1), the method comprising:

receiving a request (signal, refer to 0038) from a remote user for connection with a network at a virtual home gateway, said the home gateway (NAS/PDSN and ANC are interpreted as one entity, refer to 0038) in communication with a second AAA server (128, refer to Fig 1) which is not located within said virtual private network (the system is a Virtual private network because the system's network provides privacy and contains security procedure – refer to AAA server, 0013 and Local AAA server, refer to 0038); associating the remote user with the virtual private network (refer to 0038), at the virtual home gateway;

sending a request to authenticate the remote user with said virtual private network from the virtual home gateway to the first AAA server located within said virtual private network (156, refer to Fig 1);

connecting the remote user to the network if the first AAA server authenticate the user (refer to 0038); and

sending accounting information directly to the first and second AAA servers (refer to 0040, and refer to 0043);

wherein authentication of the remote user is performed without contacting the second AAA server associated with the virtual home gateway (refer to 0038).

A computer readable storage medium for storing the codes (computing device, which is inherently comprises memories that store codes, refer to 0007).

Although Wenzel disclosed the invention substantially as claimed, Wenzel is silent regarding "performing a lookup of the address of the first AAA server at the virtual home gateway".

Haverinen, in an analogous art, discloses a system performs "a lookup of the address of the first AAA server at the virtual home gateway" (GAGW which is the virtual home gateway, refer to

Col 11, Lines 36, must have a lookup address of the AAA server in order to pass information to HAAA server, refer to Col 11, Lines 35-36, further, the gateway GAGW is interfacing with various network therefore, it has various ports, in order to sent the information to the right network and right server, GAGW must have a lookup table to lookup the address. This feature is also a well known feature, and can be supported by US Patent 6,161,144);

Hence, providing features disclosed by Haverinen, would be desired for a user to implement in order to prevent unauthorized PPP sessions from being forwarded to the destination and reduce the potential security risks.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Wenzel by including the features presented by Haverinen.

- 2. Referring to Claims 2 and 26, Wenzel discloses the remote users receiving a network ID and address of an AAA server of the virtual private network (refer to 0038, once the network connection has established, the user have to know the network ID and address in order to transmit/receive information).
- 3. Referring to Claims 4 and 27, Wenzel teaches associating the remote user comprises sending a request to a service provider AAA server to authorize the remote user (refer to 0038).
- 4. Referring to Claims 5 and 28, although Wenzel disclosed the invention substantially as claimed, Wenzel is silent regarding "the service provider AAA server contains the address of the network's AAA server".

Haverinen, in an analogous art, discloses a system that comprising "the service provider AAA server contains the address of the network's AAA server" (in order to pass information back and forth, the service provider must know the address of the network's AAA server, refer to Col 12, Lines 52-53).

Hence, providing features disclosed by Haverinen, would be desired for a user to implement in order to prevent unauthorized PPP sessions from being forwarded to the destination and reduce the potential security risks.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Wenzel by including the features presented by Haverinen.

5. Referring to Claim 6, although Wenzel disclosed the invention substantially as claimed, Wenzel is silent regarding "sends a request to authenticate the remote user comprises routing the request using a customer routing table of the virtual private network".

Haverinen, in an analogous art disclosing a system that comprises "sends a request to authenticate the remote user comprises routing the request using a customer routing table of the virtual private network (refer to Col 12, Lines 14-16, in order to transfer data from customer to AAA server);

Hence, providing features disclosed by Haverinen, would be desired for a user to implement in order to prevent unauthorized PPP sessions from being forwarded to the destination and reduce the potential security risks.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Wenzel by including the features presented by Haverinen.

6. Referring to Claim 7, although Wenzel disclosed the invention substantially as claimed, Wenzel is silent regarding "wherein connecting the remote user to the virtual private network comprises setting up a PPP session for the remote user".

Haverinen, in an analogous art disclosing a system that comprises "wherein connecting the remote user to the virtual private network comprises setting up a PPP session for the remote user" (refer to Col 30, Lines 6-30).

Hence, providing features disclosed by Haverinen, would be desired for a user to implement in order to prevent unauthorized PPP sessions from being forwarded to the destination and reduce the potential security risks.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Wenzel by including the features presented by Haverinen.

- 7. Referring to Claim 8, Wenzel teaches comprises sending an accounting request to the virtual private network's AAA server (refer to 0038).
- 8. Referring to Claim 9, Wenzel teaches comprises sending an accounting request to the service provider's AAA server (refer to 0042).
- 9. Referring to Claim 10, Wenzel teaches wherein accounting information sent to the virtual private network's AAA server is different than accounting information sent to the service provider's AAA server (refer to 0038 and 0042).

Application/Control Number: 10/051,861 Page 7

Art Unit: 2151

10. Referring to Claim 12, Wenzel teaches wherein associating a remote user with the network comprises identifying the network based on a dial-up phone number (refer to 0007).

- 11. Referring to Claim 13, Wenzel teaches wherein associating a remote user with the virtual private network comprises identifying the network based on the circuit ID (mobile utilized the circuit switch and comprises circuit ID).
- 12. Referring to Claims 11 and 20, although Wenzel disclosed the invention substantially as claimed, Wenzel is silent regarding "associating a remote user with the virtual private network comprises identifying the virtual private network based on a domain name".

Haverinen, in an analogous art, discloses a system comprises "associating a remote user with the virtual private network comprises identifying the virtual private network based on a domain name" (refer to Col 12, Lines 59).

Hence, providing features disclosed by Haverinen, would be desired for a user to implement in order to prevent unauthorized PPP sessions from being forwarded to the destination and reduce the potential security risks. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Wenzel by including the features presented by Haverinen.

13. Referring to Claim 19, Wenzel wherein the information received from the remote user is a circuit ID (mobile utilized the circuit switch and comprises circuit ID).

Application/Control Number: 10/051,861

Art Unit: 2151

14. Referring to Claim 21, Wenzel discloses wherein the information received from the

Page 8

remote user is a dial-up phone number (It is an inherent features, since the user is a mobile

device, the information transmitted to contact to the foreign network, is to dial a dial-up number).

15. Referring to Claim 22, wherein a service provider AAA server coupled to the virtual

home gateway and configured to authorize the remote user (refer to 0038, 0101, table 1, page 2).

16. Referring to Claim 23 and 24, although Wenzel disclosed the invention substantially

as claimed, Wenzel is silent regarding "wherein the virtual home gateway comprises a plurality

of routing tables corresponding to different virtual private network".

Haverinen, in an analogous art, discloses a system comprises "the virtual home gateway

comprises a plurality of routing tables corresponding to different virtual private network" (refer

to Col 20, Lines 1-21, the gateway must have plurality of routing table in order to support

various network and Col 20, Lines 62-65).

Hence, providing features disclosed by Haverinen, would be desired for a user to implement in

order to prevent unauthorized PPP sessions from being forwarded to the destination and reduce

the potential security risks. Therefore, at the time of the invention, it would have been obvious to

one of ordinary skill in the art to modify the system of Wenzel by including the features

presented by Haverinen.

Application/Control Number: 10/051,861

Art Unit: 2151

## Conclusion

Examiner's Notes: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571)272-3440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KT

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
DECHNOLOGY CENTER 2100